GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM
Instrument Procedures Subgroup
May 4-5, 1998
RECOMMENDATION DOCUMENT

FAA Control # 98-01-206

SUBJECT: Washington DC P-56 Airspace and KDCA IFR Departures

BACKGROUND/DISCUSSION: The Secret Service issued an edict to the FAA last year that pilot intrusions into P-56 must be resolved. If the FAA fails to abate the problem, the Secret Service has indicated that it will assume jurisdiction over the matter. In an attempt to resolve the matter, industry groups met last year with regional FAA personnel and redesigned P-56 operating procedures for aircraft arriving and departing KDCA Airport.

The remaining unresolved issue is the construction of IFR takeoff minimums for KDCA's Runway 36. ALPA believes this is a proper subject for this forum, because of the extreme sensitivity of the issue and the broad implications for evolving IFR departure criteria.

The attached illustration shows that a substantial portion of P-56 lies within the TERPs departure Zone 1 for Runway 36. Zone 1 is applicable for any IFR departure on Runway 36, whether it be the published IFR departure procedure, any future SID, or any departure radar vector.

The present Runway 36 IFR departure procedure and takeoff minimums have non-compliant "early turn" language which reads "turn as soon as feasible." For aircraft operating in instrument meteorological conditions, the minimum turning altitude is 400 feet, above DER elevation. TERPs, Paragraph 1207c permits a turn "as soon as ***practicable***" but with the condition that a minimum ceiling of 400 feet and 1 mile visibility be required if there is an obstacle in Zone 1.

The obstacle that is treated in the present Runway 36 Zone 1 is the Washington Monument. The present Zone 1 evaluation correctly provides a climb gradient option for safe overflight of the monument for an aircraft that is operating on the edge of the statistical Bell Curve for Zone 1 and thus flies directly over the monument. Under IMC, it is presumed that a small percentage of operations will occur over the monument.

P-56 covers a lot larger area, though, and cannot be overflown. Thus, it must be laterally avoided, which makes an early turn mandatory. What is uncertain is whether the Secret Service would accept P-56 as being "frangible" for competently flown departures off Runway 36 under IMC.

If P-56 is absolutely inviolate, even during very low visibility departure weather, and with an aircraft flown to 400 feet in the standard manner, then the lowest takeoff minimums for Runway 36 need to be 400-1, with 600-2 required in the event the published climb gradient cannot be met. Further, the Runway 36 IFR departure procedure needs to be revised to read "turn as soon as practicable." In the alternative, if the Secret Service will accept the "frangibility" of P-56 for competently flown standard takeoff minimum

departures from Runway 36, then standard takeoff minimums should be authorized, but without any reference to an early turn.

RECOMMENDATION: AFS-420 should provide a study to demonstrate what percentage of competently flown, standard takeoff minima, instrument departures will penetrate P-56 while within Zone 1, or the initial turning portion of Zone 2. A subgroup should be formed to review and accept these data, then meet with the appropriate Secret Service personnel to present our technical findings. If the Secret Service deems P-56 "infrangible" for IMC departures off Runway 36, then 400-1 should become the permanent lowest takeoff minimum for Runway 36. Further, this group should recommend a detailed, graphical P-56 avoidance chart for Runway 36, perhaps including some distinct strobe lighting for 400-1 type weather conditions.

In the interim, pending the results of such evaluation, the lowest takeoff minimums for Runway 36 should be 400-1, with a "turn as soon as practicable" specified.

COMMENTS: This affects the IFR takeoff minimums and instrument departure procedures for Runway 36 at KDCA.

Submitted by Captain Tom Young, Chairman
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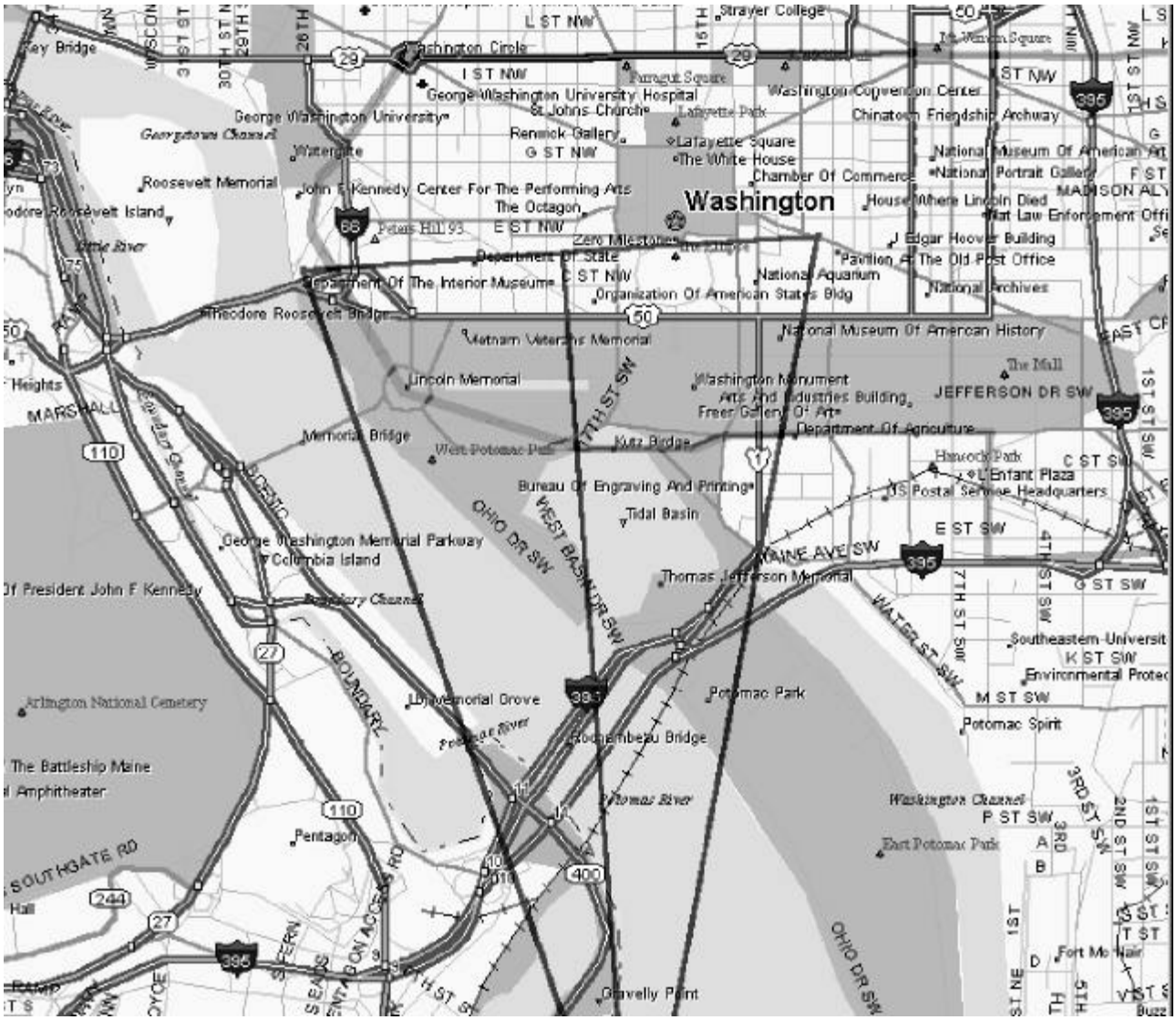
attachment



INITIAL DISCUSSION (Meeting 98-01): Tom Young presented this issue on behalf of ALPA. The Washington DC P-56 area is impacting development of IFR departure procedures for KDCA. ALPA is concerned the FAA has not effectively resolved this issue. Although there have been a number of proposed fixes for the problem of P-56 incursions, aircraft are still being reported by the Secret Service as violating the airspace boundary as identified. ALPA recommends AFS 420 do a complete study of the problem to identify ways and means to resolve this issue. Will Swank, AFS-200, is involved in a working group studying the number of P-56 incursions still being registered. It was recommended that this group look at the issue with AFS-420 and AVN-100 input and report at the next meeting. ACTION: AFS-200.

MEETING 98-02: Will Swank, AFS-200, and Mike Werner, AVN-160, briefed background on the issue and provided a prototype of a new KDCA RWY 36 DP that was developed to help avoid P-56 incursions. The prototype design was widely accepted by the group; however, a question arose as to whether both ATC and obstacle clearance climb gradients would be published. Art Dodds, NOAA, also noted that it is unusual to chart the topographical and cultural detail noted in the prototype. It is a premise that this would be a one of a kind procedure. The prototype was accepted and it is recommended that study continue to include simulator testing, ATC acceptance, charting specifications, etc. ACTION: AFS-200 and AVN-160.

MEETING 99-01: Will Swank, AFS-200, briefed the prototype DP developed by the P-56 Committee. During discussion, Tom Young, ALPA, mentioned that the charted track could cause aircrews to use TIDAL as a flyover vice flyby waypoint. He requested consideration of showing the ground track passing left of TIDAL. Bill Hammett, AFS-420 (ISI), suggested that perhaps emphasizing the turn commence at 400 ft would eliminate the problem. The group consensus was that the prototype is good; however, text and graphic enhancements are needed to avoid confusion and reduce P-56 incursions. All attendees were requested to review the prototype and forward comments to AFS-200 ASAP. ACTION: AFS-200 and AVN-160.

MEETING 99-02: Will Swank, AFS-200, briefed results of the ad-hoc committee thus far. He handed out a prototype DP chart for KDCA RWY 1 and a draft copy of the proposed entry for the AFD. The procedure and text were discussed at length with minor textual and graphic changes suggested. It was noted by Wally Roberts, ALPA, that this type DP is not expected to proliferate; this DP is expected to be a one-time procedure for an airport with unique operational constraints. John Moore questioned if the "IMC/VMC" designation in the procedure title is necessary. The group consensus was that it is not required. The forum unanimously agreed that pre-design and coordination efforts are mature enough to forward the procedure to AVN-100 for development and publication. ACTION: AFS-200.

MEETING 00-01: Will Swank, AFS-200, briefed results of the ad-hoc committee thus far and handed out the latest prototype departure charts. Since the last meeting, there has been discussion between users and AFS-200 on publication of required climb gradients. The issue has been resolved and the final procedure design, as well as verbiage to be used, is complete. The procedures will be forwarded through FAA Eastern Region to AVN-100 for development in the very near future. AFS-200 will issue a FSIB and possibly a special notice in the *Notices to Airmen Publication* prior to implementation. ACTION: AFS-200.

MEETING 00-02: An AFS-200 representative was not available to address the issue. Brad Rush, AVN-160, briefed that the DP's had been developed by AVN-100. Variances from criteria were noted and forwarded to AFS-420 for evaluation. Wally Roberts, ALPA, noted that it was agreed that this would be a one-of-a-kind procedure that has been well coordinated; there should be no delay in processing for publication. Brad briefed that the target date for publication is next Spring. ACTION: AVN-160.

MEETING 01-01: The AFS-200 specialist was unable to attend the meeting. Brad Rush, AVN-160, briefed that the DP's have been developed and that AVN-100 is working with AFS-420 to ensure the wording is correct for the associated waivers. He estimates that the procedures should be published on the 6 Sept chart dates. ACTION: AVN-160.